

SEQUENCE LISTING

SEQ ID No. 1 CM7 amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
71 Val Asn Gly Met Val His Val Ile Lys Gly
81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
191 Gln Cys Ile Ile Pro Asn Lys

SEQ ID No. 2 CM7 DNA sequence

1 ATGCAGTGCA ACGCTCCGGA ATGGCTGCCG TTCGCGCGCC CGACCAACCT
51 GACTGATGAA TTTGAGTTCC CGATCGGTAC CTACCTGAAC TACGAATGCC
101 GCCCGGGTTA TAGCGGCCGC CCGTTTTCTA TCATCTGCCT GAAAAACTCT
151 GTCTGGACTG GTGCTAAGGA CCGTTGCCGA CGTAAATCTT GTCGTAATCC
201 GCCAGATCCG GTTAACGGCA TGGTGCAATG GATCAAAGGC ATCCAGTTCC
251 GTTCCCAAAT TAAATATTCT TGTACTAAAG GTTACCGTCT GATTGGTTCC
301 TCCAGCGCTA CATGCATCAT CTCTGGTGAT ACTGTCATTT GGGATAATGA
351 AACACCGATT TGTGACCGAA TTCCGTGTGG TCTGCCGCCG ACCATCGCCA
401 ACGGTGATTT CACCTCTATC AGTCGCGAGT ATTTTCACTA TGGTTCTGTG

43

451 GTGACCTACC ACTGCAATCT GGGTAGCCGT GGTA AAAAGG TGTTTGAGCT
 501 CGTGGGTGAG CCGTCCATCT ACTGCACTAG CAAAGACGAT CAAGTGGGCA
 551 TCTGGAGCGG CCCGGCACCG CAGTGCATCA TCCCGAACAA A

SEQ ID No. 3 DNA sequence

1 CGACCATCGC CAACGGTGAT TTCACCTCTA TCAGTCGCGA GTATTTTCAC

SEQ ID No. 4 DNA sequence

1 GTGAAAATAC TCGCGACTGA TAGAGGTGAA ATCACC GTTG GCGATGGTCG

SEQ ID No. 5 DNA sequence

1 GACCTACCAC TGCAATCTGG GTAGCCGTGG TAAAAGGTG TTTGAGC

SEQ ID No. 6 DNA sequence

1 GCTCAAACAC CTTTTTACCA CGGCTACCCA GATTGCAGTG GTAGGTC

SEQ ID No. 7 DNA sequence

1 GCACTAGCAA AGACGATCAA GTGGG

SEQ ID No. 8 DNA sequence

1 CCCACTTGAT CGTCCTTgCT AGTGC

SEQ ID No. 9 CMI amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Val His Val Ile Lys Gly
 81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
 91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
 101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
 111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
 121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
 131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile

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44

141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
 151 Val Thr Tyr Arg Cys Asn Pro Gly Ser Gly
 161 Gly Arg Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Asn Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys

SEQ ID No. 10 CM1 DNA sequence

1 ATGCAGTGCA ACGCTCCGGA ATGGCTGCCG TTCGCGCGCC CGACCAACCT
 51 GACTGATGAA TTTGAGTTCC CGATCGGTAC CTACCTGAAC TACGAATGCC
 101 GCCCGGGTTA TAGCGGCCGC CCGTTTTCTA TCATCTGCCT GAAAAACTCT
 151 GTCTGGACTG GTGCTAAGGA CCGTTGCCGA CGTAAATCTT GTCGTAATCC
 201 GCCAGATCCG GTTAACGGCA TGGTGCATGT GATCAAAGGC ATCCAGTTCG
 251 GTTCCCAAAT TAAATATTCT TGTACTAAAG GTTACCGTCT GATTGGTTCC
 301 TCCAGCGCTA CATGCATCAT CTCTGGTGAT ACTGTCATTT GGGATAATGA
 351 AACACCGATT TGTGACCGAA TTCCGTGTGG TCTGCCGCCG ACCATCGCCA
 401 ACGGTGATTT CACCTCTATC AGTCGCGAGT ATTTTCACTA TGGTTCTGTG
 451 GTGACCTACC GCTGCAATCC GGGTAGCGGT GGTCGTAAGG TGTGAGCT
 501 CGTGGGTGAG CCGTCCATCT ACTGCACTAG TAATGACGAT CAAGTGGGCA
 551 TCTGGAGCGG CCCGGCACCG CAGTGCATCA TCCCGAACAA A

SEQ ID No. 11 CM2 amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Val His Val Ile Lys Gly
 81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
 91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
 101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
 111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
 121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
 131 Thr Ile Thr Asn Gly Asp Phe Ile Ser Thr
 141 Asn Arg Glu Asn Phe His Tyr Gly Ser Val

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45

151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
 161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Asn Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys

SEQ ID No. 12 CM2 DNA sequence

1 ATGCAGTGCA ACGCTCCGGA ATGGCTGCCG TTCGCGCGCC CGACCAACCT
 51 GACTGATGAA TTTGAGTTCC CGATCGGTAC CTACCTGAAC TACGAATGCC
 101 GCCCGGGTTA TAGCGGCCGC CCGTTTCTA TCATCTGCCT GAAAAACTCT
 151 GTCTGGACTG GTGCTAAGGA CCGTTGCCGA CGTAAATCTT GTCGTAATCC
 201 GCCAGATCCG GTTAACGGCA TGGTGATGT GATCAAAGGC ATCCAGTTCC
 251 GTTCCCAAAT TAAATATTCT TGTACTAAAG GTTACCGTCT GATTGGTTCC
 301 TCCAGCGCTA CATGCATCAT CTCTGGTGAT ACTGTCAATTT GGGATAATGA
 351 AACACCGATT TGTGACCGAA TTCCGTGTGG TCTGCCGCCG ACCATCACCA
 401 ACGGTGATTT CATCTCTACC AATCGCGAGA ATTTTCACTA TGGTTCTGTG
 451 GTGACCTACC ACTGCAATCT GGGTAGCCGT GGTA AAAAGG TGT TTGAGCT
 501 CGTGGGTGAG CCGTCCATCT ACTGCACTAG TAATGACGAT CAAGTGGGCA
 551 TCTGGAGCGG CCCGGCACCG CAGTGCATCA TCCCGAACAA A

SEQ ID No. 13 CM3 amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Val His Val Ile Lys Gly
 81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
 91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
 101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
 111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
 121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
 131 Thr Ile Thr Asn Gly Asp Phe Ile Ser Thr
 141 Asn Arg Glu Asn Phe His Tyr Gly Ser Val

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46

151 Val Thr Tyr Arg Cys Asn Pro Gly Ser Gly
161 Gly Arg Lys Val Phe Glu Leu Val Gly Glu
171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
191 Gln Cys Ile Ile Pro Asn Lys

SEQ ID No. 14 CM3 DNA sequence

1 ATGCAGTGCA ACGCTCCGGA ATGGCTGCCG TTCGCGCGCC CGACCAACCT
51 GACTGATGAA TTTGAGTTCC CGATCGGTAC CTACCTGAAC TACGAATGCC
101 GCCCGGGTTA TAGCGGCCGC CCGTTTTCTA TCATCTGCCT GAAAAACTCT
151 GTCTGGACTG GTGCTAAGGA CCGTTGCCGA CGTAAATCTT GTCGTAATCC
201 GCCAGATCCG GTTAACGGCA TGGTGCATGT GATCAAAGGC ATCCAGTTCC
251 GTTCCCAAAT TAAATATTCT TGTACTAAAG GTTACCGTCT GATTGGTTCC
301 TCCAGCGCTA CATGCATCAT CTCTGGTGAT ACTGTCATTT GGGATAATGA
351 AACACCGATT TGTGACCGAA TTCCGTGTGG TCTGCCGCCG ACCATCACCA
401 ACGGTGATTT CATCTCTACC AATCGCGAGA ATTTTCACTA TGGTTCTGTG
451 GTGACCTACC GCTGCAATCC GGGTAGCGGT GGTCGTAAGG TGTTTGAGCT
501 CGTGGGTGAG CCGTCCATCT ACTGCACTAG CAAAGACGAT CAAGTGGGCA
551 TCTGGAGCGG CCCGGCACCG CAGTGCATCA TCCCGAACAA A

SEQ ID No. 15 CM5 amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
71 Val Asn Gly Met Val His Val Ile Lys Gly
81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val

47

151 Val Thr Tyr Arg Cys Asn Pro Gly Ser Gly
 161 Gly Arg Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys

SEQ ID No. 16 CM5 DNA sequence

1 ATGCAGTGCA ACGCTCCGGA ATGGCTGCCG TTCGCGCGCC CGACCAACCT
 51 GACTGATGAA TTTGAGTTCC CGATCGGTAC CTACCTGAAC TACGAATGCC
 101 GCCCGGGTTA TAGCGGCCGC CCGTTTTCTA TCATCTGCCT GAAAAACTCT
 151 GTCTGGACTG GTGCTAAGGA CCGTTGCCGA CGTAAATCTT GTCGTAATCC
 201 GCCAGATCCG GTTAACGGCA TGGTGATGT GATCAAAGGC ATCCAGTTCC
 251 GTTCCCAAAT TAAATATTCT TGTACTAAAG GTTACCGTCT GATTGGTTCC
 301 TCCAGCGCTA CATGCATCAT CTCTGGTGAT ACTGTCAATT GGGATAATGA
 351 AACACCGATT TGTGACCGAA TTCCGTGTGG TCTGCCGCCG ACCATCGCCA
 401 ACGGTGATTT CACCTCTATC AGTCGCGAGT ATTTTCACTA TGGTTCTGTG
 451 GTGACCTACC GCTGCAATCC GGGTAGCGGT GGTCGTAAGG TGTTTGAGCT
 501 CGTGGGTGAG CCGTCCATCT ACTGCACTAG CAAAGACGAT CAAGTGGGCA
 551 TCTGGAGCGG CCCGGCACCG CAGTGCAATCA TCCCGAACAA A

SEQ ID No. 17 CM6 amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Val His Val Ile Lys Gly
 81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
 91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
 101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
 111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
 121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
 131 Thr Ile Thr Asn Gly Asp Phe Ile Ser Thr
 141 Asn Arg Glu Asn Phe His Tyr Gly Ser Val

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48

151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
 161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys

SEQ ID No. 18 CM6 DNA sequence

1 ATGCAGTGCA ACGCTCCGGA ATGGCTGCCG TTCGCGCGCC CGACCAACCT
 51 GACTGATGAA TTTGAGTTCC CGATCGGTAC CTACCTGAAC TACGAATGCC
 101 GCCCGGGTTA TAGCGGCCGC CCGTTTTCTA TCATCTGCCT GAAAAACTCT
 151 GTCTGGACTG GTGCTAAGGA CCGTTGCCGA CGTAAATCTT GTCGTAATCC
 201 GCCAGATCCG GTTAACGGCA TGGTGCATGT GATCAAAGGC ATCCAGTTCC
 251 GTTCCCAAAT TAAATATTCT TGTACTAAAG GTTACCGTCT GATTGGTTCC
 301 TCCAGCGCTA CATGCATCAT CTCTGGTGAT ACTGTCATTT GGGATAATGA
 351 AACACCGATT TGTGACCGAA TTCCGTGTGG TCTGCCGCCG ACCATCACCA
 401 ACGGTGATTT CATCTCTACC AATCGCGAGA ATTTTCACTA TGGTTCTGTG
 451 GTGACCTACC ACTGCAATCT GGGTAGCCGT GGTA AAAAGG TGT TTGAGCT
 501 CGTGGGTGAG CCGTCCATCT ACTGCACTAG CAAAGACGAT CAAGTGGGCA
 551 TCTGGAGCGG CCCGGCACCG CAGTGCATCA TCCCGAACAA A

SEQ ID No. 19 CM8 amino acid sequence

1 Met Arg Ile Pro Cys Gly Leu Pro Pro Thr
 11 Ile Ala Asn Gly Asp Phe Thr Ser Ile Ser
 21 Arg Glu Tyr Phe His Tyr Gly Ser Val Val
 31 Thr Tyr Arg Cys Asn Pro Gly Ser Gly Gly
 41 Arg Lys Val Phe Glu Leu Val Gly Glu Pro
 51 Ser Ile Tyr Cys Thr Ser Asn Asp Asp Gln
 61 Val Gly Ile Trp Ser Gly Pro Ala Pro Gln
 71 Cys Ile Ile Pro Asn Lys

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SEQ ID No. 20 CM8 DNA sequence

1 ATGCGAATTC CGTGTGGTCT GCCGCCGACC ATCGCCAACG GTGATTTCAC
51 CTCTATCAGT CGCGAGTATT TTCACTATGG TTCTGTGGTG ACCTACCGCT
101 GCAATCCGGG TAGCGGTGGT CGTAAGGTGT TTGAGCTCGT GGGTGAGCCG
151 TCCATCTACT GCACTAGTAA TGACGATCAA GTGGGCATCT GGAGCGGCCC
201 GGCACCGCAG TGCATCATCC CGAACAAA

SEQ ID No. 21 CM9 amino acid sequence

1 Met Arg Ile Pro Cys Gly Leu Pro Pro Thr
11 Ile Thr Asn Gly Asp Phe Ile Ser Thr Asn
21 Arg Glu Asn Phe His Tyr Gly Ser Val Val
31 Thr Tyr His Cys Asn Leu Gly Ser Arg Gly
41 Lys Lys Val Phe Glu Leu Val Gly Glu Pro
51 Ser Ile Tyr Cys Thr Ser Asn Asp Asp Gln
61 Val Gly Ile Trp Ser Gly Pro Ala Pro Gln
71 Cys Ile Ile Pro Asn Lys

SEQ ID No. 22 CM9 DNA sequence

1 ATGCGAATTC CGTGTGGTCT GCCGCCGACC ATCACCAACG GTGATTTCAT
51 CTCTACCAAT CGCGAGAATT TTCACTATGG TTCTGTGGTG ACCTACCACT
101 GCAATCTGGG TAGCCGTGGT AAAAAGGTGT TTGAGCTCGT GGGTGAGCCG
151 TCCATCTACT GCACTAGTAA TGACGATCAA GTGGGCATCT GGAGCGGCCC
201 GGCACCGCAG TGCATCATCC CGAACAAA

SEQ ID No. 23 CM10 amino acid sequence

1 Met Arg Ile Pro Cys Gly Leu Pro Pro Thr
11 Ile Thr Asn Gly Asp Phe Ile Ser Thr Asn
21 Arg Glu Asn Phe His Tyr Gly Ser Val Val
31 Thr Tyr Arg Cys Asn Pro Gly Ser Gly Gly
41 Arg Lys Val Phe Glu Leu Val Gly Glu Pro
51 Ser Ile Tyr Cys Thr Ser Lys Asp Asp Gln
61 Val Gly Ile Trp Ser Gly Pro Ala Pro Gln
71 Cys Ile Ile Pro Asn Lys

SEQ ID No. 24 CM10 DNA sequence

1 ATGCGAATTC CGTGTGGTCT GCCGCCGACC ATCACCAACG GTGATTTCAT
51 CTCTACCAAT CGCGAGAATT TTCACTATGG TTCTGTGGTG ACCTACCGCT
101 GCAATCCGGG TAGCGGTGGT CGTAAGGTGT TTGAGCTCGT GGGTGAGCCG
151 TCCATCTACT GCACTAGCAA AGACGATCAA GTGGGCATCT GGAGCGGCCC
201 GGCACCGCAG TGCATCATCC CGAACAAA

SEQ ID No. 25 CM12 amino acid sequence

1 Met Arg Ile Pro Cys Gly Leu Pro Pro Thr
11 Ile Ala Asn Gly Asp Phe Thr Ser Ile Ser
21 Arg Glu Tyr Phe His Tyr Gly Ser Val Val
31 Thr Tyr Arg Cys Asn Pro Gly Ser Gly Gly
41 Arg Lys Val Phe Glu Leu Val Gly Glu Pro
51 Ser Ile Tyr Cys Thr Ser Lys Asp Asp Gln
61 Val Gly Ile Trp Ser Gly Pro Ala Pro Gln
71 Cys Ile Ile Pro Asn Lys

SEQ ID No. 26 CM12 DNA sequence

1 ATGCGAATTC CGTGTGGTCT GCCGCCGACC ATCGCCAACG GTGATTTCAC
51 CTCTATCAGT CGCGAGTATT TTCACTATGG TTCTGTGGTG ACCTACCGCT
101 GCAATCCGGG TAGCGGTGGT CGTAAGGTGT TTGAGCTCGT GGGTGAGCCG
151 TCCATCTACT GCACTAGCAA AGACGATCAA GTGGGCATCT GGAGCGGCCC
201 GGCACCGCAG TGCATCATCC CGAACAAA

SEQ ID No. 27 CM13 amino acid sequence

1 Met Arg Ile Pro Cys Gly Leu Pro Pro Thr
11 Ile Thr Asn Gly Asp Phe Ile Ser Thr Asn
21 Arg Glu Asn Phe His Tyr Gly Ser Val Val
31 Thr Tyr His Cys Asn Leu Gly Ser Arg Gly
41 Lys Lys Val Phe Glu Leu Val Gly Glu Pro
51 Ser Ile Tyr Cys Thr Ser Lys Asp Asp Gln
61 Val Gly Ile Trp Ser Gly Pro Ala Pro Gln
71 Cys Ile Ile Pro Asn Lys

09380687-101999

SEQ ID No. 28 CM13 DNA sequence

1 ATGCGAATTC CGTGTGGTCT GCCGCCGACC ATCACCAACG GTGATTTCAT
51 CTCTACCAAT CGCGAGAATT TTCACTATGG TTCTGTGGTG ACCTACCACT
101 GCAATCTGGG TAGCCGTGGT AAAAAGGTGT TTGAGCTCGT GGGTGAGCCG
151 TCCATCTACT GCACTAGCAA AGACGATCAA GTGGGCATCT GGAGCGGCCC
201 GGCACCGCAG TGCATCATCC CGAACAAA

SEQ ID No. 29 CM14 amino acid sequence

1 Met Arg Ile Pro Cys Gly Leu Pro Pro Thr
11 Ile Ala Asn Gly Asp Phe Thr Ser Ile Ser
21 Arg Glu Tyr Phe His Tyr Gly Ser Val Val
31 Thr Tyr His Cys Asn Leu Gly Ser Arg Gly
41 Lys Lys Val Phe Glu Leu Val Gly Glu Pro
51 Ser Ile Tyr Cys Thr Ser Lys Asp Asp Gln
61 Val Gly Ile Trp Ser Gly Pro Ala Pro Gln
71 Cys Ile Ile Pro Asn Lys

SEQ ID No. 30 CM14 DNA sequence

1 ATGCGAATTC CGTGTGGTCT GCCGCCGACC ATCGCCAACG GTGATTTCAC
51 CTCTATCAGT CGCGAGTATT TTCACTATGG TTCTGTGGTG ACCTACCACT
101 GCAATCTGGG TAGCCGTGGT AAAAAGGTGT TTGAGCTCGT GGGTGAGCCG
151 TCCATCTACT GCACTAGCAA AGACGATCAA GTGGGCATCT GGAGCGGCCC
201 GGCACCGCAG TGCATCATCC CGAACAAA

SEQ ID No. 31 CM7/cys amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
71 Val Asn Gly Met Val His Val Ile Lys Gly
81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser

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53

Asp Gly Pro Lys Lys Lys Lys Lys Lys Ser
Pro Ser Lys Ser Ser Gly (N-Myristoyl)

SEQ ID No. 35: Amino acid sequence of peptide used in MSWP synthesis

1 Gly Ser Ser Lys Ser Pro Ser Lys Lys Lys
11 Lys Lys Lys Pro Gly Asp Cys NH₂

SEQ ID No. 36 CM15/cys amino acid sequence

1	Met	Gln	Cys	Asn	Val	Pro	Glu	Trp	Leu	Pro
11	Phe	Ala	Arg	Pro	Thr	Asn	Leu	Thr	Asp	Asp
21	Phe	Glu	Phe	Pro	Ile	Gly	Thr	Tyr	Leu	Asn
31	Tyr	Glu	Cys	Arg	Pro	Gly	Tyr	Ser	Gly	Arg
41	Pro	Phe	Ser	Ile	Ile	Cys	Leu	Lys	Asn	Ser
51	Val	Trp	Thr	Ser	Ala	Lys	Asp	Lys	Cys	Lys
61	Arg	Lys	Ser	Cys	Arg	Asn	Pro	Pro	Asp	Pro
71	Val	Asn	Gly	Met	Ala	His	Val	Ile	Lys	Asp
81	Ile	Gln	Phe	Arg	Ser	Gln	Ile	Lys	Tyr	Ser
91	Cys	Pro	Lys	Gly	Tyr	Arg	Leu	Ile	Gly	Ser
101	Ser	Ser	Ala	Thr	Cys	Ile	Ile	Ser	Gly	Asn
111	Thr	Val	Ile	Trp	Asp	Asn	Lys	Thr	Pro	Val
121	Cys	Asp	Arg	Ile	Ile	Cys	Gly	Leu	Pro	Pro
131	Thr	Ile	Ala	Asn	Gly	Asp	Phe	Thr	Ser	Ile
141	Ser	Arg	Glu	Tyr	Phe	His	Tyr	Gly	Ser	Val
151	Val	Thr	Tyr	His	Cys	Asn	Leu	Gly	Ser	Arg
161	Gly	Lys	Lys	Val	Phe	Glu	Leu	Val	Gly	Glu
171	Pro	Ser	Ile	Tyr	Cys	Thr	Ser	Lys	Asp	Asp
181	Gln	Val	Gly	Ile	Trp	Ser	Gly	Pro	Ala	Pro
191	Gln	Cys	Ile	Ile	Pro	Asn	Lys	Cys		

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SEQ ID No. 37 DNA sequence

1 CAGTGCAACG TGCCGGAATG G

SEQ ID No. 38 DNA sequence

1 CCATTCCGGA ACGTTGCACT G

SEQ ID No. 39 DNA sequence

1 GACTGATGAT TTTGAGTTCC

SEQ ID No. 40 DNA sequence

1 GGAACTCAAA ATCATCAGTC

SEQ ID No. 41 DNA sequence

1 GTCTGGACTA GTGCTAAGGA CAAGTGCAA CGTAAATCTT GTCG

SEQ ID No. 42 DNA sequence

1 CGACAAGATT TACGTTTGCA CTTGTCCTTA GCACTAGTCC AGAC

SEQ ID No. 43 DNA sequence

1 CGGCATGGCG CATGTGATCA AAGATATCCA GTTCCGATCG CAAATTAAAT
51 ATTCTTGTCC TAAGGGTTAC CGTC

SEQ ID No. 44 DNA sequence

1 GACGGTAACC CTTAGGACAA GAATATTTAA TTTGCGATCG GAACTGGATA
51 TCTTTGATCA CATGCGCCAT GCCG

SEQ ID No. 45 DNA sequence

1 CATCTCTGGT AATACTGTCA TTTGGGATAA TAAAACACCG GTTTGTGACC

SEQ ID No. 46 DNA sequence

1 GGTCACAAAC CGGTGTTTTA TTATCCCAA TGACAGTATT ACCAGAGATG

SEQ ID No. 47 DNA sequence

1 GACCGAATTA TCTGTGGTCT G

SEQ ID No. 48 DNA sequence

1 CAGACCACAG ATAATTCGGT C

SEQ ID No. 49 CM15/cys-MSWP1 amino acid sequence

0930682-101999

1 Met Gln Cys Asn Val Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Asp
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Ser Ala Lys Asp Lys Cys Lys
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Ala His Val Ile Lys Asp
 81 Ile Gln Phe Arg Ser Gln Ile Lys Tyr Ser
 91 Cys Pro Lys Gly Tyr Arg Leu Ile Gly Ser
 101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asn
 111 Thr Val Ile Trp Asp Asn Lys Thr Pro Val
 121 Cys Asp Arg Ile Ile Cys Gly Leu Pro Pro
 131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
 141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
 151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
 161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys Cys-S-S-Cys

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 CO₂H CONH₂

Asp Gly Pro Lys Lys Lys Lys Lys Lys Ser
 Pro Ser Lys Ser Ser Gly (N-Myristoyl)

SEQ ID No. 50 CM16/cys amino acid sequence

1 Met Gln Cys Asn Val Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Asp
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Ser Ala Lys Asp Lys Cys Lys
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Ala His Val Ile Lys Asp
 81 Ile Gln Phe Arg Ser Gln Ile Lys Tyr Ser
 91 Cys Pro Lys Gly Tyr Arg Leu Ile Gly Ser

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56

101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asn
 111 Thr Val Ile Trp Asp Asn Lys Thr Pro Val
 121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
 131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
 141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
 151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
 161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys Cys

SEQ ID No. 51 CM16/cys-MSWP1 amino acid sequence

1 Met Gln Cys Asn Val Pro Glu Trp Leu Pro
 11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Asp
 21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
 31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
 41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
 51 Val Trp Thr Ser Ala Lys Asp Lys Cys Lys
 61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
 71 Val Asn Gly Met Ala His Val Ile Lys Asp
 81 Ile Gln Phe Arg Ser Gln Ile Lys Tyr Ser
 91 Cys Pro Lys Gly Tyr Arg Leu Ile Gly Ser
 101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asn
 111 Thr Val Ile Trp Asp Asn Lys Thr Pro Val
 121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
 131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
 141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
 151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
 161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
 171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
 181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
 191 Gln Cys Ile Ile Pro Asn Lys Cys-S-S-Cys

CO₂H CONH₂

Asp Gly Pro Lys Lys Lys Lys Lys Lys Ser
 Pro Ser Lys Ser Ser Gly (N-Myristoyl)

Seq ID No. 52 DNA sequence

09380686-101999

57

1 CGCACCGCAG TGCATCATCC CGAACAPAGA TGGCCCGAGC GAAATTCTGC
51 GTGGCGATTT TAGCAGCTGC TA

Seq ID No. 53 DNA sequence

1 AGCTTAGCAG CTGCTAAAAT CGCCACGCAG AATTTCGCTC GGGCCATCTT
51 TGTTCGGGAT GATGCACTGC GGTGCGGGCC

SEQ ID NO. 54: CM7rgdcys amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
71 Val Asn Gly Met Val His Val Ile Lys Gly
81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
191 Gln Cys Ile Ile Pro Asn Lys Asp Gly Pro
201 Ser Glu Ile Leu Arg Gly Asp Phe Ser Ser
211 Cys

Seq ID No. 55 DNA sequence

1 CGCACCGCAG TGCATCATCC CGAACAAAGC GGCGCCGAGC GTGATTGGCT
51 TCCGTATTCT GCTGCTGAAA GTGGCGGGCT GATA

Seq ID No. 56 DNA sequence

09380682.101999

58

1 AGCTTATCAG CCCGCCACTT TCAGCAGCAG AATACGGAAG CCAATCAGCG
51 TGGGCGCCGC TTTGTTCGGG ATGATGCACT GCGGTGCGGG CC

SEQ ID NO. 57: CM7Tcell amino acid sequence

1 Met Gln Cys Asn Ala Pro Glu Trp Leu Pro
11 Phe Ala Arg Pro Thr Asn Leu Thr Asp Glu
21 Phe Glu Phe Pro Ile Gly Thr Tyr Leu Asn
31 Tyr Glu Cys Arg Pro Gly Tyr Ser Gly Arg
41 Pro Phe Ser Ile Ile Cys Leu Lys Asn Ser
51 Val Trp Thr Gly Ala Lys Asp Arg Cys Arg
61 Arg Lys Ser Cys Arg Asn Pro Pro Asp Pro
71 Val Asn Gly Met Val His Val Ile Lys Gly
81 Ile Gln Phe Gly Ser Gln Ile Lys Tyr Ser
91 Cys Thr Lys Gly Tyr Arg Leu Ile Gly Ser
101 Ser Ser Ala Thr Cys Ile Ile Ser Gly Asp
111 Thr Val Ile Trp Asp Asn Glu Thr Pro Ile
121 Cys Asp Arg Ile Pro Cys Gly Leu Pro Pro
131 Thr Ile Ala Asn Gly Asp Phe Thr Ser Ile
141 Ser Arg Glu Tyr Phe His Tyr Gly Ser Val
151 Val Thr Tyr His Cys Asn Leu Gly Ser Arg
161 Gly Lys Lys Val Phe Glu Leu Val Gly Glu
171 Pro Ser Ile Tyr Cys Thr Ser Lys Asp Asp
181 Gln Val Gly Ile Trp Ser Gly Pro Ala Pro
191 Gln Cys Ile Ile Pro Asn Lys Ala Ala Pro
201 Ser Val Ile Gly Phe Arg Ile Leu Leu Leu
211 Lys Val Ala Gly

09380662-101999